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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,351	01/12/2005	Takamasa Katoh	H6808.0071/P071	9170
24998 7590 03/21/2007 DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			EXAMINER MARTINELL, JAMES	
			ART UNIT	PAPER NUMBER
			1634	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/21/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/521,351	KATOH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James Martinell	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Claims 1, 2, and 3 are objected to because of the following informalities.

- (a) The recitation of "processing information on nucleotide sequence" (claims 1, 2, and 3) is awkward. Changing the passage to "processing nucleotide sequence information" would be sufficient to overcome this objection.

Appropriate correction is required.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending Application Serial Numbers as appear in the following table. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the following table are embraced by the broader instant claims 1-6.

<u>Copending Application SN</u>	<u>Claims</u>
10/976,039	14-16, 43, and 44
10/975,453	17-21, 45-49, 101, and 102
10/543,759	1-6
10/535,407	1-6
10/534,979	1, 3, and 9-11

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<u>Copending Application SN</u>	<u>Claims</u>
10/496,588	1-25
10/372,923	61, 64, 69-72, 82, 85, and 101-104
10/153,691	1, 4, 9-13, 26, 29, 33, 34, 36, 41, 42, 54, 56, 57, and 61-68

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague, indefinite, and incomplete.

- (a) The recitation of "nucleotide sequence-related information associated with positional information" (claim 1(c)) is vague and indefinite because the instant application does not clearly define "associated with".
- (b) The recitation of "nucleotide sequence-related information corresponding to the positional information" (claim 1(c)) is vague and indefinite because the instant application does not clearly define "corresponding to".
- (c) The recitation of "semantic information" (claims 1(c), 1(d), 2(b), 2(c), and 3(d)) is vague and indefinite because the instant application does not distinguish between semantic information and non-semantic information.
- (d) The recitation of "information implied" (claims 1(c), 2(b), and 3(d)) is vague and indefinite because the meaning of the term is not understood within the context of the claims.

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- (e) The recitation of "information associated with the semantic information" (claims 1(c), 1(d), 29b), and 2(c)) is vague and indefinite because the instant application does not clearly define "associated with".
- (f) The recitation of "in association with the positional information corresponding thereto" (claims 1(d), 2(c), and 3(d)) is vague and indefinite because the instant application does not clearly define "corresponding to".
- (g) The recitation of "corresponding thereto" (claim 1(d)) is incomplete because the antecedent is unclear.
- (h) The recitation of "to the party" (claim 1(d)) is incomplete because there is no antecedent basis for the phrase.
- (i) The recitation of "associated with positional information representing a position in a nucleotide sequence" (claim 2(a)) is vague and indefinite because the instant application does not clearly define "associated with".
- (j) The recitation of "in accordance with requested information" (claim 2(a)) is incomplete because there is no antecedent basis for the phrase.
- (k) The recitation of "the party that had transmitted nucleotide sequence-related information in step (a)" (claim 2(a)) is incomplete because there is no antecedent basis for the phrase.
- (l) The recitation of "the party that had transmitted the requested information" (claim 2(c)) is incomplete because there is no antecedent basis for the phrase.
- (m) The recitation of "the requested information" (claim 2(c)) is incomplete because there is no antecedent basis for the phrase.
- (n) The recitation of "the party that utilizes the semantic information and/or information associated with the semantic information" is incomplete because there is no antecedent basis for the phrase.

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- (o) The recitation of "obtaining from a plurality . . . corresponding to the positional information received in step (a)" (claim 3(b)) is vague and indefinite because the passage is not understood.
- (p) The recitation of "consistency" (claims 4 and 5) is vague and indefinite because the metes and bounds of the claims are not clear. The instant application does not distinguish between consistency and inconsistency.
- (q) The recitation of "the positional information related to the nucleotide sequence-related information transmitted in step (c)" (claim 4) is incomplete because there is no antecedent basis for the phrase.
- (r) The recitation of "alerting the party" (claim 5) is incomplete because there is no antecedent basis for the phrase.
- (s) The recitation of "positional information associated with the nucleotide sequence-related information transmitted in step (c)" (claims 5 and 6) is vague and indefinite because the instant application does not clearly define "associated with".
- (t) The recitation of "disclosing the information concerning the party that had received the nucleotide sequence-related information" (claim 6) is incomplete because there is no antecedent basis for the phrase.
- (u) The recitation of "a third party" (claim 6) is incomplete because there is no antecedent basis for the phrase.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Boyce-Jacino et al (WO 01/26029 (April 12, 2001), Denton et al (WO 01/01218 (January 4, 2001), or Qiagen

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Product Guide 2000 (Qiagen Inc., Valencia, CA, 2000, pages 250-253). Boyce-Jacino et al teaches the transmission of nucleic acid sequence data over the Internet (*e.g.*, see the Abstract, pages 7-12, and claims 1-31). Denton et al teaches the determination of haplotypes and the transmission of nucleic acid sequence data over a communications network (*e.g.*, see the Abstract, pages 7-10, and 27-29). Qiagen product Guide 2000 teaches the determination of nucleic acid sequence data and the reporting of said data to a requester (*e.g.*, see pages 250-253). The claims are broad enough to embrace the methods taught in any one of the references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (571) 272-0719.

The examiner works a flexible schedule and can be reached by phone and voice mail. Alternatively, a request for a return telephone call may be e-mailed to [james.martinell@uspto.gov](mailto:james.martinell@uspto.gov). Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571) 272-0735.

#### **OFFICIAL FAX NUMBER**


The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any Official Communication to the USPTO should be faxed to this number.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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**James Martinell, Ph.D.**  
**Primary Examiner**  
**Art Unit 1634**

3/7/07